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WHAT IS CLAIMED IS:

An organic film vapor deposition method comprising:

a first step of supporting a substrate formed with a scintillator on at least three protrusions of a target-support element disposed on a vapor deposition table so as to keep a distance from said vapor deposition table;

a second step of introducing said vapor deposition table having said substrate supported by said target-support element into a vapor deposition chamber of a CVD apparatus; and

a third step of depositing an organic film by CVD method onto all surfaces of said substrate, provided with said scintillator, introduced into said vapor deposition chamber in a state that said substrate is supported so as to keep a distance from said vapor deposition table.

- An organic film vapor deposition method according to claim 1, wherein said target-support element is constituted by at least three target-support needles.
- 3. An organic film vapor deposition method according to claim 1, wherein said target-support element is constituted by a strand member.
- 4. An organic film vapor deposition method according to claim 1, wherein said organic film is a polyparaxylylene film.
 - 5. A scintillator panel with organic film

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deposited by the method according to claim 1.

- A scintillator panel comprising:
- a substrate;
- a scintillator formed on said substrate; and
 an organic film covered substantial all surfaces of
 said substrate not only over the scintillator side but also
 over the opposite side.
- A scintillator panel according to claim 6, wherein said organic film is a polyparaxylylene film.

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